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TI Interaction of ***integrins*** alpha v beta 3 and glycoprotein
IIb-IIIa with fibrinogen. Differential peptide recognition accounts for
distinct binding sites.

AU ***Smith J W*** ; Ruggeri Z M; Kunicki T J; Cheresh D A

SO JOURNAL OF BIOLOGICAL CHEMISTRY, (1990 Jul 25) 265 (21)
12267-71.
Journal code: HIV. ISSN: 0021-9258.

Pharmacological Report

Receptor Inhibition Assay

Purified human integrins $\alpha_v\beta_3$ and $\alpha_v\beta_5$ from term placenta were adsorbed to microtitre wells and challenged with biotinylated complementary ligands - vitronectin (VN) for $\alpha_v\beta_3$ and $\alpha_v\beta_5$ in the presence of increasing amounts of test compounds.

Method: $1 \mu\text{g ml}^{-1}$ biotin-ligand was incubated with $1 \mu\text{g ml}^{-1}$ coated receptor in the presence of serially diluted EMD peptides. After 3 h at 30°C bound ligand was measured by anti-biotin - alkaline phosphatase detection.

Literature: Charo, I.F., Nannizzi, L., Smith, J.W. and Cheresh, D.A., J. Cell. Biol. **111**, 2795-2800 (1990).

Table I

Q values (= quotient of IC_{50} values of test compound and standard) for binding of biotinylated ligands to human placental $\alpha_v\beta_3$ and $\alpha_v\beta_5$

Sequence	Q	Q
	VN: $\alpha_v\beta_3$	VN: $\alpha_v\beta_5$
cyclo-(Arg-Gly-Asp-DPhe-NMeVal)	0.3	0.1
Standard cyclo-(Arg-Gly-Asp-DPhe-Val)	1.00 (1.8 nM)	1.00 (266 nM)